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9/16/87



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: J.G. BEDNORZ ET AL

DATE: AUGUST 5, 1987

SERIAL NO.: 06/053,307

ART UNIT:

FILING DATE: 5/22/87

EXAMINER:

FOR: NEW SUPERCONDUCTIVE COMPOUNDS HAVING HIGH TRANSITION TEMPERATURE,  
AND METHODS FOR THEIR USE AND PREPARATION

CITATION OF REFERENCES UNDER 37 CFR 1.56

TO: The Commissioner of Patents and Trademarks

Washington, D.C. 20231

The invention described and claimed herein relates to a new class of superconducting materials, a method for making these materials, and the use of these materials. This invention is a pioneering invention which has created world-wide interest and the inventors herein are recognized as the discoverers of this new area of science, often termed "high  $T_c$  superconductivity".

As noted in the specification, the invention was first described by the inventors in a publication of their discovery in Zeitschrift fur Physik B-Condensed Matter, 64, pp. 189-193

(Sept. 1986), and the subject application is based on the teachings of that publication.

The art of superconductivity prior to applicants' discovery is described in the specification, where numerous references are mentioned. All of these references describing superconductivity discuss materials having a critical transition temperature  $T_c$  that does not exceed about 23K. These known materials include elements (metals), alloys, and compounds such as oxides. The references attached hereto describe these materials and discuss superconductive materials in general to provide a background of this technology from its inception in 1911 to the time of applicants' discovery. No reference is known which in any way suggests the presence of a superconductive state at temperatures in excess of about 23K.

Respectfully submitted

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Y0987-074